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Phase I Archaeological Survey of the Proposed
Johnston Trails Project in the Downstream Corridor,
Saylorville Lake, Polk County, Iowa

DACW25-93-M-0426

by
Timothy S. Weitzel
Project Archaeologist

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Fred A. Finney and Stephen C. Lensink
Co-Principal Investigators

Contract Completion Report
367

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Office of the State Archaeologist
The University of Iowa
Iowa City
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A Phase I archeological survey was conducted for the proposed Johnston Trails of the Des Moines Recreational River and Greenbelt Project. The total project area is approximately 39.5 ha (97.5 acres) in Sections 6, 5, 7, 8, 17, and 18, T79N-R24W, Saylor Township, Polk County, Iowa. The purpose of the survey was to determine if there were any prehistoric or historic archaeological materials that might be disturbed by construction of the proposed project. Field investigations included a pedestrian survey and subsurface Seymour auger tests. One previously recorded site, 13PK437, is located near the project area. This survey discovered one previously unrecorded site, 13PK595, within the project area. Artifacts from 13PK595 date to circa 1944, and background research indicates the principal structure at the site was standing between the years 1931 and 1971. The investigations indicate that the site 13PK595 is heavily disturbed and is not eligible for listing on the National Register of Historic Places (NRHP). On the basis of background research and survey results the project right-of-way is recommended for clearance from an archeological perspective.

Introduction

This report has been prepared by the Office of the State Archaeologist (OSA), The University of Iowa, under the terms of a cultural resource survey agreement between the OSA and the Rock Island District, U.S. Army Corps of Engineers. Johnston Trails is located in the Downstream Corridor of Saylorville Lake in Polk County, Iowa. The project area consists of four transects, named Traverses A-D, that lie within the Des Moines River Valley between Interstate 80 to the south, Merle Hay Road to the West, and on the north by a local road which extends from Johnston to Saylorville (Figure 1). The Des Moines River channel is the eastern boundary of the project area. The total extent of the project area covers 39.5 ha (97.5 acres).

The OSA is solely responsible for the interpretations and recommendations contained in this report. All records including maps and figures are curated at the OSA. The purpose of the survey was to locate any possible archaeological materials within the construction area and determine whether any significant resources would be affected by the proposed construction. The Phase I investigation was conducted on March 29 and April 5-6, 1993, by Matthew S. Logan, Jeannie Hyde, Jan Stoffer, Greg Vogel and Timothy S. Weitzel. Tim Weitzel was the Project Archaeologist and Fred Finney was the Project Director.

Project Area Description

The proposed project is located within the Iowa landform region known as the Des Moines Lobe (Figure 1, inset). This region is underlain by glacial till deposited during the most recent ice advances into Iowa, approximately 12,000 to 14,000 years ago. The Bernis, Altamont, and Algona end moraines delimit the three major Late Wisconsinan glacial ice margins. The surface of the Des Moines Lobe lacks a Wisconsinan loess mantle (Prior 1991:39-40, 47). Except along major streams, drainage systems are generally not well established. Kettle lakes, eskers, kames, and other features formed by ice wasting and meltwater discharge, mark the landscape. Though many wetlands have been drained, the majority of Iowa's natural lakes are located in the region. The Des Moines River and its immediate tributaries deeply incise the till plain, exposing the underlying bedrock in many places.

Holocene alluvial valley fills in Iowa are subdivided on the basis of lithology and stratigraphic relationships into four members within the DeForest Formation. These are known as the Gunder, Corrington, Roberts Creek, and Camp Creek members (Bettis and Little 1987). Gunder Member alluvium and Corrington Member alluvial fans may contain Paleo-Indian through Woodland components; Robert's Creek Member deposits may contain Late Archaic through

early historic components; and Camp Creek Member alluvium may contain buried and unburied historic archaeological components, and may bury older surfaces (Table 1).

The project area lies within the Downstream Corridor of Saylorville Lake. The Downstream Corridor encompasses approximately 1,210 ha (2,990 acres) of floodplain along the Des Moines River between the Saylorville Dam and the Sixth Avenue bridge in the City of Des Moines (Benn and Bettis 1981:ii; Ron Pulcher, personal communication 1993). The cultural and environmental history of this area has been described in detail by Benn and Bettis (1981) and Bettis and Benn (1984). The Downstream Corridor involves a complex series of geological events most of which occurred at the end of the Wisconsinan when glacial outwash and ice wasting dramatically effected the landscape in the Des Moines River Valley. The terrace system within the Downstream corridor was formed at this time (Figures 2-3).

The following description of the Downstream Corridor's prehistory is taken from Benn and Bettis (1981:5-7). Additional summary information on the culture history of Saylorville Lake is available in Benn and Rogers (1985), Gradwohl (1974), and previous survey reports (e.g., Gradwohl 1975; Gradwohl and Osborn 1973a, 1973b, 1974, 1975a, 1975b, 1976; Osborn and Gradwohl 1977, 1981, 1982). In the Downstream Corridor, Late Paleo-Indian and Early Archaic culture periods are represented by surface finds of unfluted lanceolate projectile points and medium sized points with ground bases. Typologically these point styles are similar to those found in excavations at the Cherokee Sewer site in western Iowa (Anderson and Semken 1980) and from the Logan Creek complex in the eastern Plains (e.g., Agogino and Frankforter 1960). Bettis and Benn report "eared" lanceolate points, points that are similar to Clovis-type points but without basal flutes, and the Browns Valley points that have been recovered from prairie lake sites on the central Des Moines Lobe.

While Middle Archaic cultural remains have not been clearly identified in the central Des Moines valley, some sites which date to the Middle Archaic have been found in alluvium within the Downstream Corridor. Late Archaic sites appear to be a common occurrence in the Des Moines valley, most of which represent seasonal camp sites devoted to obtaining animal food resources. Such resources include large mammals, such as deer, elk, and bison, small mammals, and aquatic animals. These sites are identified by radiocarbon dates of 1100 B.C. and 670 B.C. obtained from 13PK149 and large- and medium-sized projectile points with stems or shallow side notches (Timberlake 1981).

Woodland cultures are represented by many sites in the Des Moines valley (Benn and Rogers 1985; Gradwohl 1974, Osborn et al. 1989; Thies 1989; Timberlake 1981). Large village and mound sites, such as Boone Mound (Lensink 1968), and small camp and mound sites have been dated to the Middle and Late Woodland periods by diagnostic artifacts such as Middle Woodland pottery similar to Illinois Havana (Griffin 1952) and Late Woodland Saylor ware type sherds dated to AD. 700-1000 (Osborn et al. 1989; Thies 1989; Timberlake 1981). Numerous small debris scatters are also placed in the Woodland period via their position relative to known geomorphic units. These scatters may represent Early, Middle, or Late Woodland components. Woodland sites in the Des Moines valley occur primarily upon the High Terrace or in the pre-Holocene bluffs, with a few sites from this period are located in floodplain.

Late Prehistoric occupations in the Des Moines valley north of the City of Des Moines are characterized by Great Oasis components. Cultural remains include large camps and villages with numerous subterranean pits. Many of these pits are filled with trash debris. Subsistence evidence includes evidence for the maize, beans, and squash horticultural complex and bison hunting. Radiocarbon dating places the Great Oasis sites after A.D. 900. One significant Oneota component, the Christenson site, is located in the Downstream Corridor. Christenson is interpreted a seasonal resource procurement site, i.e., hunting camp dating to ca. A.D. 1250

(Benn 1984). A number of other Oneota occupations are known in the Des Moines valley south of the City of Des Moines (Benn and Rogers 1985; Osborn 1982).

During the Protohistoric period the Chiwere Siouan-speaking Ioway are thought to have hunted in and around the Des Moines River Valley (Mott 1938; Wedel 1986). In 1830 the Ioway ceded by treaty all lands in the state of Iowa. A subsequent treaty in 1842 gave the Sauk and Fox, also known as the Mesquakie, a three year claim to all the lands in Iowa from near Red Rock to the western border. After this time they were to leave Iowa (Union Historical 1880). It is known the Mesquakie lived in the Des Moines vicinity since there are records showing the Sauk and Fox traded with European settlers at Fort Des Moines in 1843. In 1845 the Sauk and Fox were removed to Kansas. In that same year, prior to an official survey of the area, John Saylor established the first homestead in the present location of Saylorville, just east of the Downstream Corridor. By 1847 numerous homesteads and at least one mill had been established within the Downstream Corridor (General Land Office 1848). Substantial impact upon the High Terrace had been made by the late nineteenth century. Atlases (Andreas 1970, Huebinger 1904) show channelized streams and modification to Lake Fisher on the eastern side of the Corridor had been completed by this time. Additionally, Saylorville had greatly increased in size and many farmsteads were located above the Low Holocene Terraces.

Archaeological Assessment

METHODS

The Iowa Site Record at the OSA, 1848 land survey plat maps (General Land Office 1848), the 1875 Andreas atlas (1970), and the Polk County soil survey (McCracken 1960) were reviewed prior to survey. Polk County atlases from 1902 to 1960 were also consulted (Booth 1960, Hovey 1902, Kenyon Map 1914, Midland Map 1911-1930, North West 1907). One previously recorded historic building foundation, 13PK437, was noted to lie within the project area (Figure 4). The soil survey (McCracken 1960) shows at least two buildings at the site of 13PK437, however, the area occupied by the westernmost building is now within the area that has been quarried. Another structure is shown to lie within the project area at the time of the aerial photo used by McCracken (1960) was taken. This site was not recorded in the Iowa Site Record. It is discussed below as site 13PK595.

The project area was investigated by pedestrian survey and 22 subsurface tests (Figure 5). Subsurface tests were completed only along the High Terrace areas where there was a moderate to high potential for buried cultural deposits (Table 1). High Terrace portion of the project covered a linear distance of 2,438 m (8,000 ft.). These tests were executed with a Seymour bucket auger in two rays originating at the eastern end of the reservoir access road that follows the proposed Traverse B, and approximately following the proposed alignment of Traverse A where it runs parallel to the Des Moines river channel. These tests were excavated to two m unless other obstructions prevented the unit to be fully excavated. Twenty cm was arbitrarily picked as the depth for each level within the subsurface tests. All excavated materials were screened through 6.4 mm ($\frac{1}{4}$ -inch) hardware cloth.

All Low Terrace areas were determined to be of low archeological potential in the Benn and Bettis (1981) survey and were not tested below the surface. Therefore, the Beaver Creek and extreme northern portions of Traverse A, nearly all of Traverse C, and all of Traverse D were eliminated from subsurface testing by their proposed location within the Low Terrace environment. Other areas were eliminated from subsurface testing by the observation of heavily disturbed areas during the pedestrian survey. All of the Beaver creek portion of Traverse A was

disturbed by channeling of Beaver Creek and the construction of a dike on the southern edge of what is now a gravel quarry pit. Traverse B was eliminated from subsurface testing due to heavy disturbance along its length. The area had been disturbed through quarry operations and the construction of an unpaved road along its length. The western part of Traverse C was excluded from subsurface testing due to heavy disturbance from borrowing, quarrying, and other recent disturbances along the proposed alignment for that portion of the project.

RESULTS

The areas that comprise the Low Terrace are likely a Robert's Creek member that has been truncated and overlain by the Camp Creek member which comprises the current floodplain. The Low Terrace is a geologically recent formation that is undergoing active fluvial processes that frequently disturb the deposits of which the terrace is made. In addition, the Low Terrace along the Beaver Creek portion of the proposed Traverse A has been heavily disturbed through channelizing activities and dike construction. These factors indicate that there is a low potential for archaeological deposits to occur within the Low Terrace portions of the project area. Therefore, no subsurface tests would need to be conducted in these areas (Art Bettis, personal communication 1993). Surface reconnaissance would be required to check for sites such as the previously recorded historic foundation at 13PK437 that lies in the current flood plain within the project area. No prehistoric sites are recorded within the Low Terrace of the project area. None of the area covered in this survey was within the Intermediate terrace.

The main portion of the project area lies along the edge of a Holocene-age High Terrace (Figures 2-3). As it has been indicated in the above discussion archeological deposits may occur within the High Terrace. Buried Archaic sites and near surface late prehistoric sites have been identified in other High Terraces. The presence of adjacent gravel pits is indicative of the formation processes of the underlying sedimentary levels of the project area. In particular, at least one or several high energy depositional episodes deposited the gravel forming the High Terrace upon which much of the proposed Traverse A portion of the project area lies. The High Terrace appears to be the result of a complex deposition and erosion sequence, and it seems probable, based upon site reconnaissance and research that a generalized description of the High Terrace should include a Camp Creek member overlying a Corrington or Gunder Member alluvial fan that has been truncated by fluvial activity where it meets the current Des Moines river channel (Benn and Bettis 1981; Bettis and Benn 1984; Art Bettis, personal communication 1993).

Recent gravel and sand quarry operations have disturbed substantial portions of this terrace. These disturbances are post-1967 according to the U.S.G.S. Des Moines NW Quadrangle and recent plat books (Hawkeye Farm 1971; Rockford Map 1983). Areas of the terrace that lie within the proposed project area have not been directly removed, but have been disturbed in other ways. An abandoned bucket from a dragline for dike construction are indications of alteration made to areas of the High Terrace adjacent to the gravel pits. Additionally, dirt and gravel roadways have been constructed along the Traverse B portion of the project. Several areas of made land have been appended to the High terrace but probably did not directly affect the deposits within the High Terrace itself. No historic or prehistoric sites were previously recorded lie within the High Terrace portion of the proposed project area. Subsurface testing and pedestrian survey are complementary methods to test the High Terrace areas of the project for the potential presence of archaeological materials.

The pedestrian survey recovered only a few historic artifacts. Most of the low terrace areas are wooded and subsequently the surface is leaf-covered. Surface visibility of 95-100 percent was observed along recreational vehicle trails and other similar disturbances within the Low

Terrace. Considerable historic debris was observed, and almost all of this debris was confined to the Low Terrace. Much of this debris, such as a water heater in the northern portion of the project area, was partially buried under alluvium and may be fairly recently deposited. Other debris, such as a Ford Model T located near the historic foundation recorded as site 13PK437 is not so recent (Figure 4). In either case, the Low Terrace appears to have been an area where objects have been left to be later incorporated into the alluvium through flood activity.

The only significant exception to the association of historic debris with the Low Terrace is the previously unrecorded site 13PK595. Apart from 13PK595, the High Terrace was found to be relatively free of cultural debris. Vegetation cover on the High Terrace was predominantly short grass with a surface visibility of 80-90 percent. No prehistoric artifacts were recovered in the pedestrian survey of the High Terrace portions of the project area but many recently deposited cultural materials were observed. A section of the High Terrace appears to have been washed-out by high water from one of the gravel pits and subsequently replaced with fill dirt (Figure 3). Two other areas in the southern portion of the project area are part of "made-land" and therefore are not natural occurrences. This area was also disturbed by the construction of the same dike that has disturbed a major portion of the Beaver Creek section of the project area. Several other items were noted which indicate that recent human activities have disturbed the upper portions of the High Terrace that will reduce the probability for locating intact archaeological deposits near to these disturbances. For instance, a large pile of concrete and brick rubble that was apparently dumped across the High Terrace, possibly to inhibit off-road vehicle travel along the edge of the gravel quarry. Large pieces of concrete and bricks were buried within a second off-road trail cut around the pile of rubble such that only a small portion of each protruded from the surface of the High Terrace. Apparently the use of vehicles this off-road trail when it was wet buried some of the rubble. Near this area an abandoned scoop-bucket from a dragline was observed. The scoop was buried approximately .5 m into the High Terrace. Large, square, wooden utility poles have been placed into eastern edge of the High Terrace within the project area. The bases of these poles are buried within the matrix of the High Terrace. The many disturbances to the high terrace would have reduced the potential for archaeological materials to remain in tact within the project area. Subsurface tests were executed in order to establish the integrity of the High Terrace deposits and indicate the presence or absence of cultural materials within it.

SUBSURFACE TESTS

A total of 22 subsurface tests were completed in two transects (Table 2). The first 12 tests were placed along the southern transect that ran along a north-south axis. The remaining 10 tests were placed along the northern transect which followed a northeast-southwest axis to follow the edge of the High Terrace and to more closely follow the proposed trail alignment. No cultural materials were observed in any of the subsurface tests with the exception of Subsurface Test 2 (Table 2). This test contained some aluminum fragments in Level 2. Based on their small size, relative thinness, and the context of disturbances to the High Terrace, these fragments are not felt to represent any culturally significant find. The fragments probably are from a beverage can that became buried thorough surficial disturbances and sediment deposition.

SITE 13PK437

This site is a recent historic concrete block building foundation recorded by the Benn and Bettis survey. Age of the building was estimated by Benn as ca. 20 years, i.e., post-1950s. Site size is given as .4 ha (1 acre) (Benn and Bettis 1981:30). This survey revisited 13PK437 and

noted the presence of a Ford Model T automobile near the foundation. The position of 13PK437 is well outside the present project right-of-way (Figure 4).

SITE 13PK595

A previously unrecorded historical site was observed during the pedestrian survey portion of the project. This site corresponds to the location of a building in the soil survey report compiled by McCracken (1960), and the 1971 photorevised U.S.G.S. Des Moines NW quadrangle, 7.5' (Figures 3 and 5). The site legal location is in the SW $\frac{1}{4}$, SE $\frac{1}{4}$, SE $\frac{1}{4}$, SW $\frac{1}{4}$ of Section 5, T79N-R24W. At the time of field investigation, 13PK595 was covered in underbrush consisting mainly of small trees. The site encompasses a general debris scatter surrounding three separate structures and a large area of house debris (Figure 6; Table 3). The three structures are quite small and do not appear to have been substantial buildings. No identifiable architectural elements were found with these structures. The original purpose and functions of each building was not discernible.

Structure 1 was observed on the lower terrace very close to the current Des Moines river channel. It was constructed of three-hole machine-made red brick. No other artifacts were found in direct association with this building. The structure included a square portion that measured approximately 1.5 m square, and a long section with several projections that measured about 2.5 by 1.5 m. The entirety of Structure 1 measured about 3.5 by 1.75 m.

Structure 2 was observed approximately 30 m to the west of Structure 1. It was approximately 2 by 2 m and was situated on the High Terrace. This structure was constructed of solid brown-red vitrified brick with the sunken letters "Flint Co." placed upon each. The brick trademark indicates that they were locally made in Des Moines after 1895 by the Flint Brick and Coal Company (Graves 1992). Organic debris and soil filled the center of this structure. Many glass and iron fragments surrounded this particular structure, and the entire area was dotted with cultural debris. For example, a large pile of glass jars, a children's swing set, and a pit filled with aluminum cans, and other domestic debris was situated in the general area (Figure 6).

Structure 3 was found approximately 30-40 m north of Structure 2. It too was situated on the High Terrace. It was constructed of hollow concrete blocks placed upon limestone slabs as a base. It was also filled with soil and organic debris and surrounded with cultural debris. Much of the debris, aluminum beverage cans and abandoned appliances, appeared to be less than 30 years old.

A large pile of burnt timbers, brick and cement, and miscellaneous refuse, such as pieces of a wash basin or sink, and plate glass, was interpreted as habitation debris based on the types of artifacts observed and collected. Numerous large timbers that resembled wooden logs had been clearly burned by fire and were found within the debris pile. These may have served as roof or wall supports. Sections of brick and mortar or brick and cement that lie within the pile may have been wall materials. A set of concrete steps lead down from the debris pile to the structure located at the edge of the Des Moines River and Structure 1. Several fragments of a stoneware ceramic wash basin or lavatory which was stamped with the year 1944 were collected from this pile of debris. Other collected materials included an electrical conduit box with a ceramic fixture for a light bulb. While the structure is shown on both the 1960 soil survey aerial photograph (McCracken 1960:Sheet 10) and the 1971 photorevised version of the U.S.G.S. Des Moines NW quadrangle, the site no longer appears on the 1976 photorevised version of the same U.S.G.S. map.

The 1875 Andreas (1970) atlas, the 1848 land survey plat maps (General Land Office 1848), and Polk County atlases from 1902 to 1960 were consulted in regard to site 13PK595. There were no historically notable features, e.g., structures, in the project right-of-way prior to 1930

(Booth, 1960, Hovey 1902, Kenyon 1914, Midland 1911-1930, North West 1907). No structures are shown for this property in the atlases consulted and the land owners listed for this land in the above atlases do not appear in any of the county histories consulted (Brigham 1911, Union Historical 1880).

On the basis of the diagnostic artifacts, occupation of 13PK595 might be assigned a date of ca. 1944, corresponding to the date of the ceramic wash basin. Areal photography shows that this site existed following the actual year of 1944. A date range of ca. 1944 to ca. 1971 could be assigned to this site, assuming that the wash basin was installed at the time that the structure was built. An absolute range can be given as post-1930 to 1971-1976 based upon plat maps and areal photographs used by McCracken (1960) and the 1956, 1971, 1976 U.S.G.S. quadrangle maps. It is likely that the main structure burned down at some time following abandonment or possibly was abandoned because of a fire. On the basis of archaeological survey and document research, site 13PK595 is not deemed eligible for the National Register of Historic Places. No further research is necessary at 13PK595.

Summary and Recommendations

No prehistoric cultural materials were found in this survey. The archaeological investigation revealed one previously unrecorded historic site, 13PK595, in the project right-of-way. It dates to the middle-half of the twentieth century based on the recovered artifacts and document research. Site 13PK595 is not considered eligible for the National Register of Historic Places. In view of the background research and the Phase I archaeological survey, it is recommended that the proposed project right-of-way be cleared from an archaeological perspective. No survey technique is completely adequate to locate all archaeological sites, especially deeply buried ones. Therefore, should any significant cultural, historical, or paleontological resources be exposed during the process of construction, the OSA (319-335-2389) must be notified immediately.

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1986 Peering at the Ioway Indians Through the Mist of Time: 1650-circa 1700. *Journal of the Iowa Archeological Society* 33:1-74.

Table 1. Preservation Potential for Buried Cultural Deposits in the Downstream Corridor of Saylorville Lake (from Benn and Bettis 1981:44)

Alluvial Fans	Beaver Creek		High Terrace	Intermediate		Low Terrace	Cultural Period Represented
	Terraces			Terraces			
++	+		+ (late)	-	-	-	Paleoindian
++	+-		++	-	-	-	Early to Middle Archaic
++	-		+	++	-	-	Late Archaic
+-	-		-	++	-	-	Woodland
+-	-		-	++	-	+-	Oneota and Great Oasis
-	-		-	+-	-	++	Historic

Key:

- not possible;
- +- low potential;
- + moderate potential;
- ++ high potential.

Table 2. Description of Subsurface Tests in the Project Area.

Test Number	Level 1 0-20 cm	Level 2 -40 cm	Level 3 -60 cm	Level 4 -80 cm	Level 5 -100 cm	Level 6 -120 cm	Level 7 -140 cm	Level 8 -160 cm	Level 9 -180 cm	Level 10 -200 cm
1	gravel, very silty loam	sandy loam with organic matter	light, sandy loam alternating with dark, blocky clay	dark, blocky clay mottled with light sand	sandy loam with dark inclusions	sand with pebbles and clay inclusions	no change	more mottled	more gray and sandy	more sandy and fewer pebbles
2	sandy clay loam gravel	Pieces of aluminum at 29 cm in sand	sand	sand mottled with loam	no change	lighter sand mottled with loam	no loam after 130 cm	sand with clay inclusions	sand with large clay inclusions	sand with iron stains at 195 cm
3	brown clay	change at 20 cm to sand mixed with clay	sand mixed with clay	no change	more sand in matrix	no change	no change	more sand in matrix	pure black clay at 170 cm halted at 180 cm	
4	upper layer removed sand with clay inclusions	gravel dark lens from 24-30 cm	no change	green sand with clay loam inclusions at 75 cm	green sand with clay loam inclusions	mostly clay loam with some green sand	black clay with green sand inclusions	solid black clay	no change	solid black clay with sticky yellow and white inclusions
5	silty clay	mottled clay and sand	no change	more sand at 70 cm	pure sand	no change	no change	change to pure clay at 150 cm	no change	no change

Table 2. continued.

Table 2. continued.

Test Number	Level 1 0-20 cm	Level 2 -40 cm	Level 3 -60 cm	Level 4 -80 cm	Level 5 -100 cm	Level 6 -120 cm	Level 7 -140 cm	Level 8 -160 cm	Level 9 -180 cm	Level 10 -200 cm
14	silty clay loam	sand with clay mottles	extremely compact black clay	no change	stopped at 90 cm due to extremely dense clay					
15	clay	no change	no change	no change	sand	no change	clay	wet sandy clay	no change	sandy clay
16	sand	no change	no change	no change	clay at 90 cm	clay	sand	no change	no change	no change
17	sandy clay loam sand at 13 cm	no change	no change	no change	gray, plasticine clay at 95 cm	sand mixed in with clay	green and very sandy	no change	no change	no change
18	silty clay	extremely compact clay	stopped at 40 cm due to dense clay							
19	sandy clay loam, just sand from 15-20 cm	dark clay with medium sized gravel	browner by 60 cm no gravel	iron staining, very compact clay	clay too dense to excavate halted at 100 cm					
20	black compact silt loam	no change	compact blocky clay	no change	clay more compact	no change but stickier clay	no change	no change	no change	no change
21	silty loamy sand	sand with pebbles	no change	no change	no change	gray clay	no change	no change	no change	no change
22	black sandy clay loam	no change	browner with more clay at 50 cm	browner more clay	browner more clay	browner more clay	browner more clay	pure brown clay at 150 cm	pure brown clay	no change with iron and lime concretions

Table 3. Artifacts collected from 13PK595 (OSA Accession Number 4041).

Artifact Type	Location	Number	Date	Reference
Ceramic sink, one piece is marked "1944"	Surface	81	1944	-
Aqua window glass	Surface	1	1800-ca.1910	IMACS 1992
Metal, electrical conduit box	Surface	1	?	-
Brick, machine-made, with mortar, one piece is marked "Flint Co."	Surface	40	post-1895	Graves 1992
Site Totals		123		

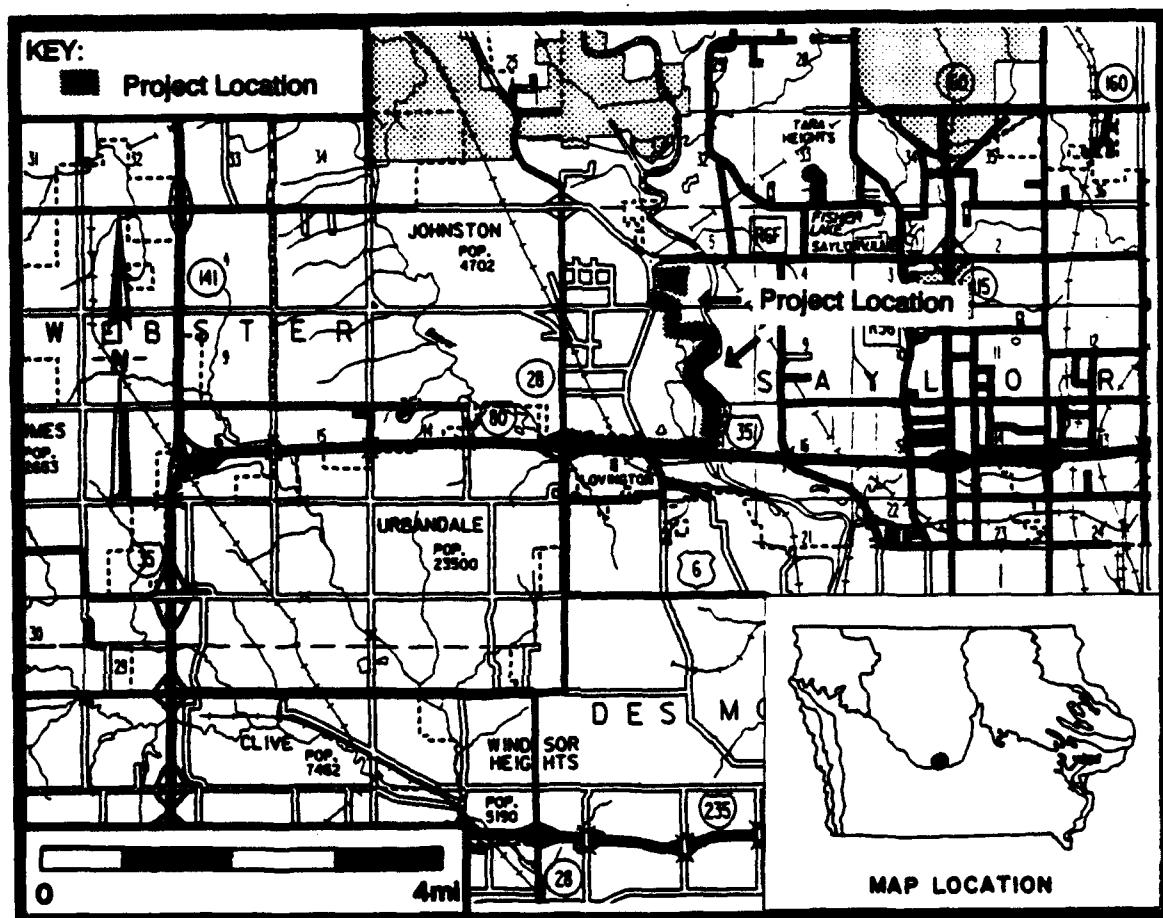


Figure 1. Project location (from General Highway and Transportation Map, Polk County, 1991; inset from Prior 1991).

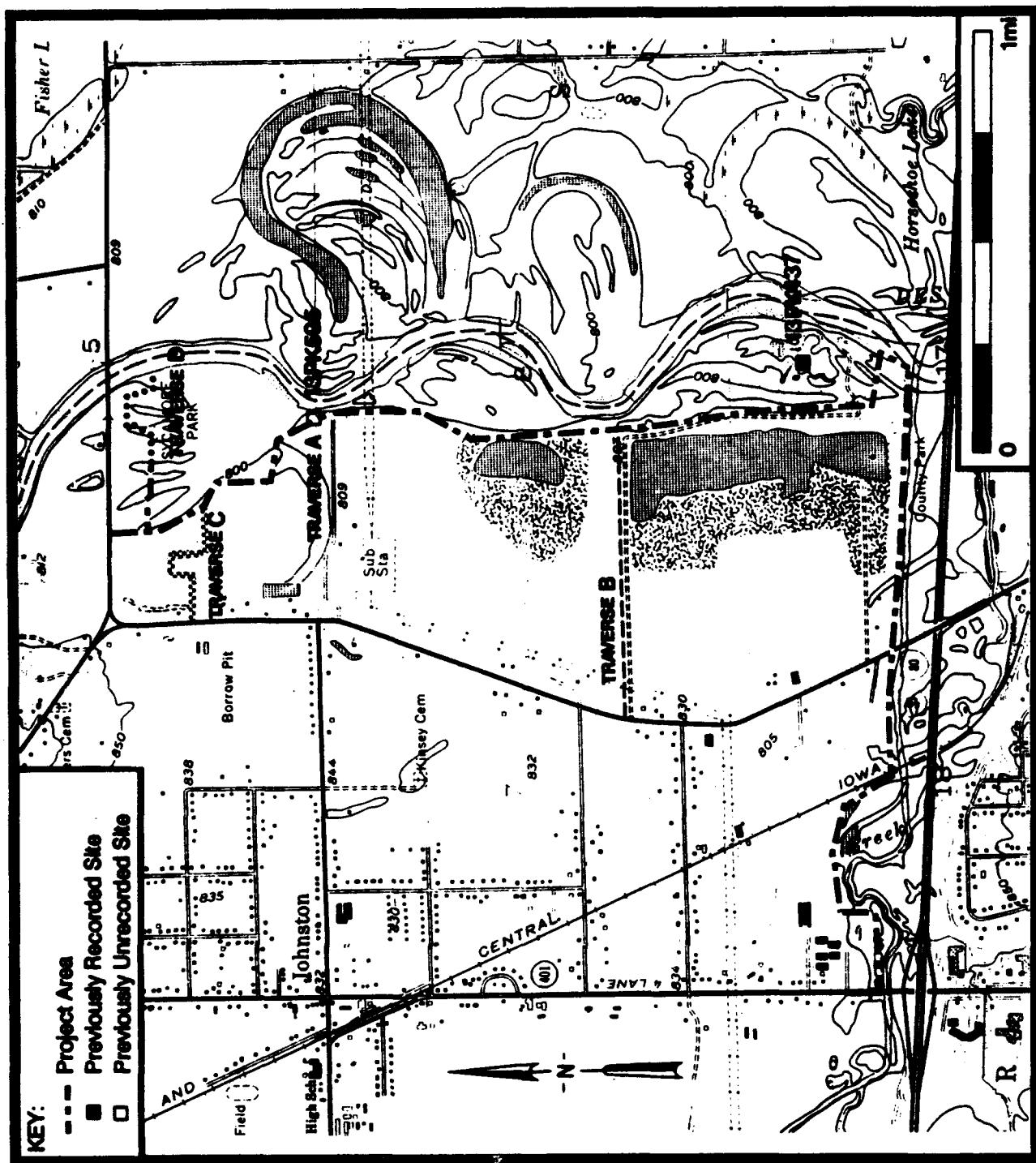


Figure 2. Project location in relation to surrounding topography (from USGS Des Moines NW Quadrangle, 1956, 7.5' series, photorevised 1967, 1971, and 1976).

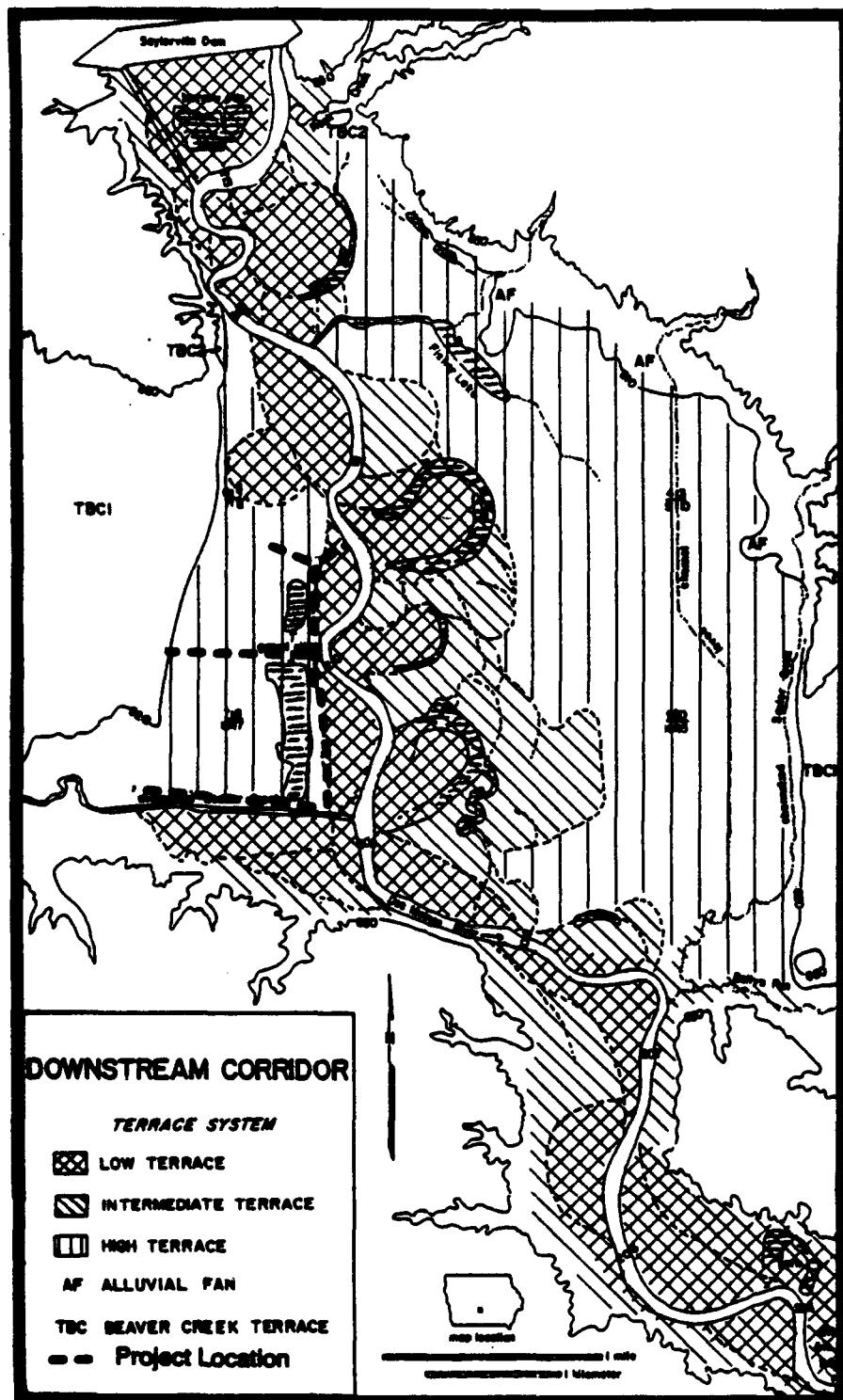


Figure 3. Project location in relation to Downstream Corridor terrace system (from Benn and Bettis 1981:57).

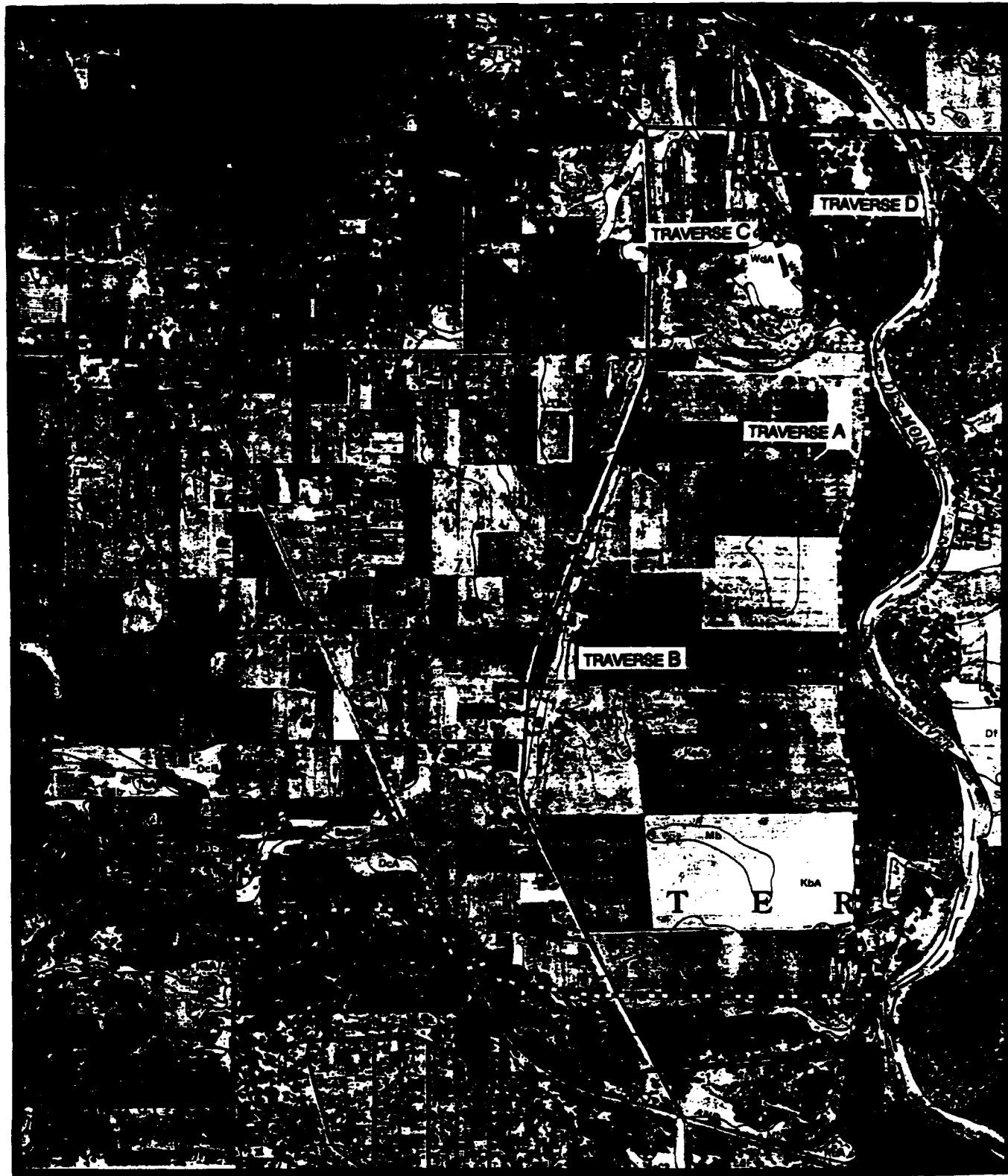


Figure 4. Project location in relation to soil types and former structures (from McCracken 1960:Sheet 10).

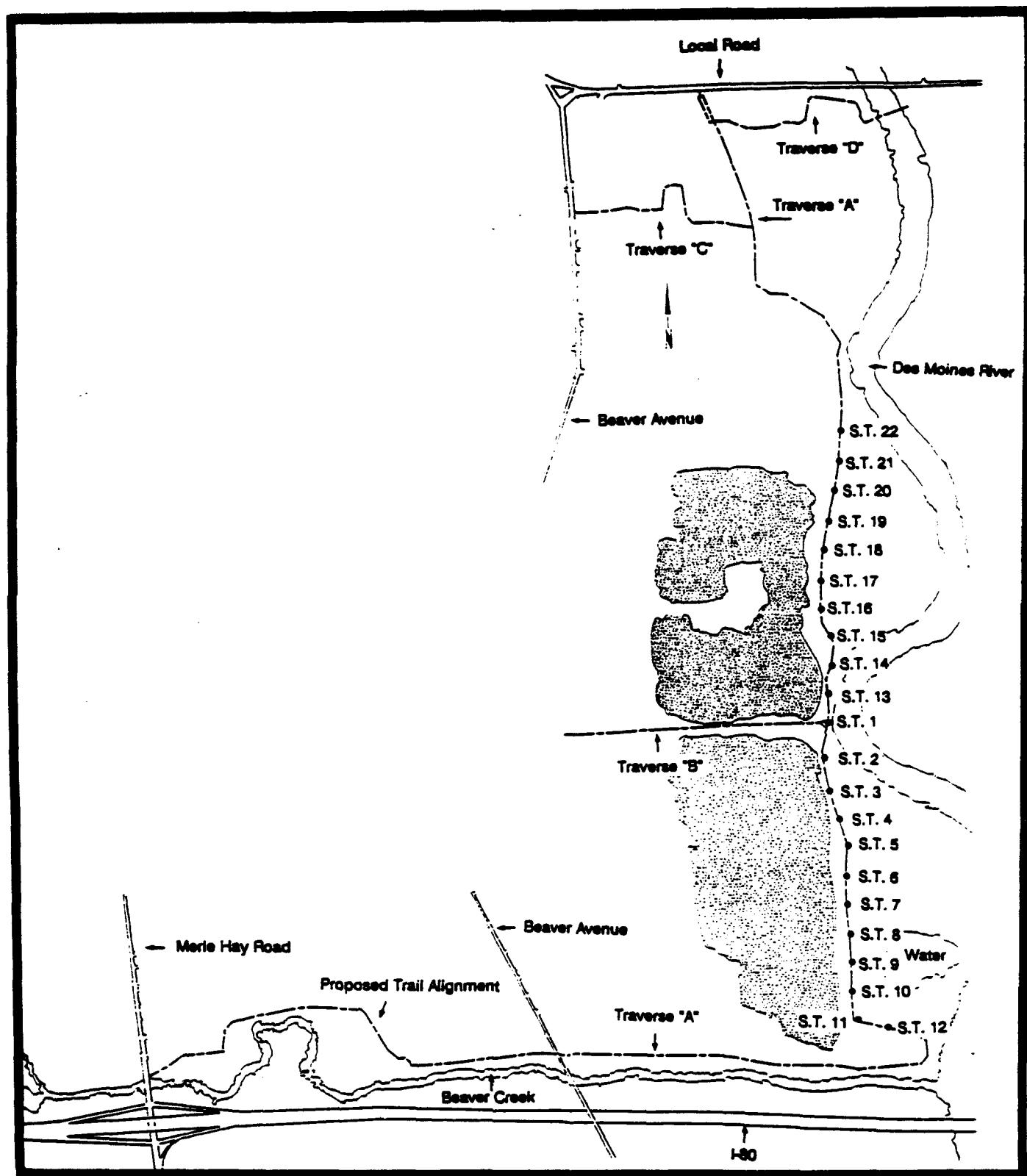


Figure 5. Location of subsurface tests within the project area.

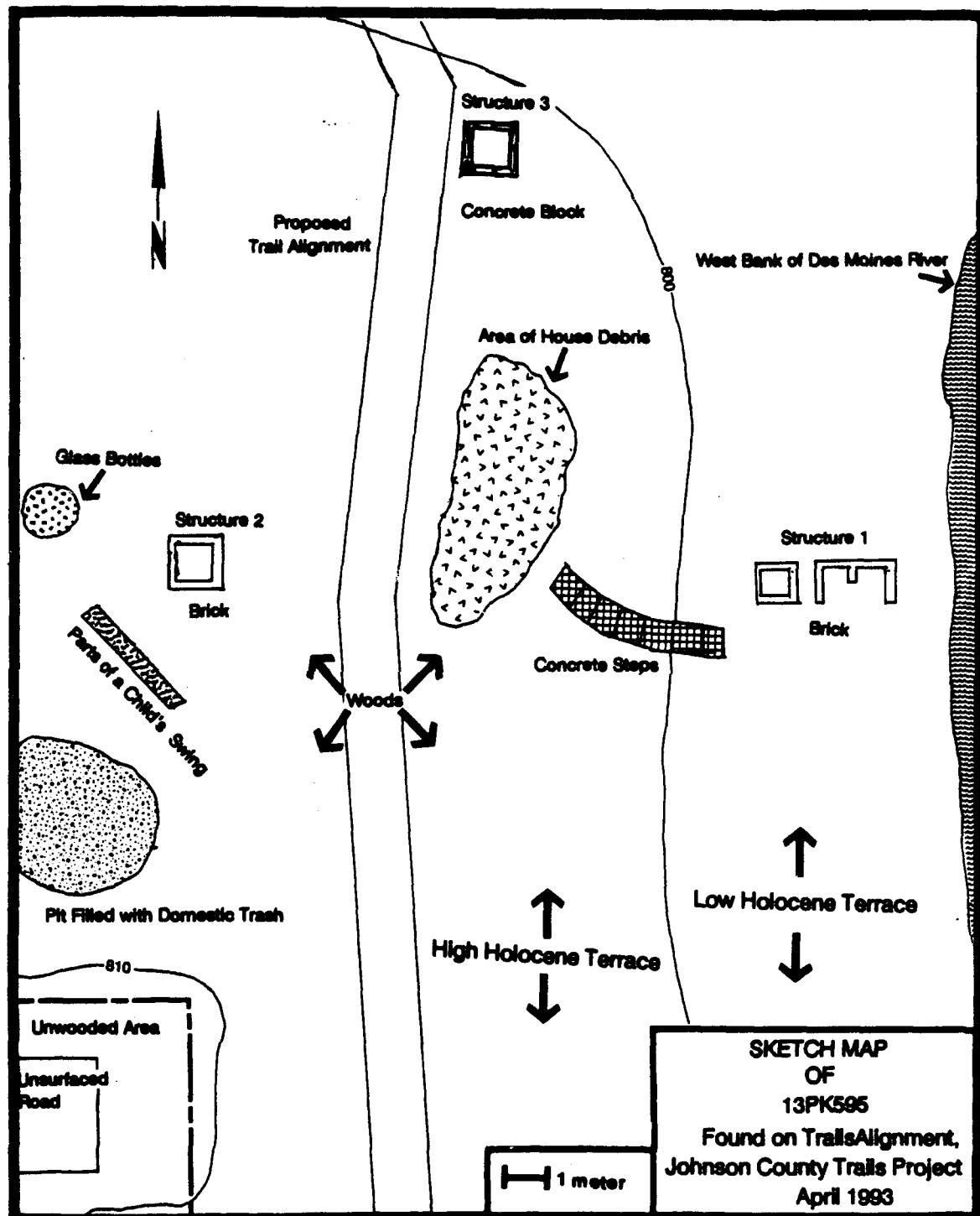


Figure 6. Sketch map of site 13PK595.

Appendix A
Project Correspondence



State Historical Society of Iowa

The Historical Division of the Department of Cultural Affairs

July 12, 1993

In reply refer to:
R&C#: 930377012

Dudley M. Hanson, P. E.
Chief, Planning Division
Rock Island District Corps of Engineers
Clock Tower Building
P. O. Box 2004
Rock Island, IL 61204-2004

RE: COE - POLK - DRAFT - PHASE I ARCHEOLOGICAL SURVEY OF THE
PROPOSED JOHNSTON TRAILS PROJECT IN THE DOWNSTREAM
CORRIDOR, SAYLORVILLE LAKE

Dear Mr. Hanson:

We have received the draft report entitled Phase I Archeological Survey of the Proposed Johnston Trails Project in the Downstream Corridor, Saylorville Lake, Polk County, Iowa. We concur with your consultant that archeological site 13PK 595 is not eligible for the National Register of Historic Places. There are no historic properties within the project area; therefore, we recommend that the project proceed.

Sincerely,

Shirley Taylor

Kathy Gourley
Archeologist, Review and Compliance Program
Historic Preservation Bureau

/st

cc: ~~✓~~ Ron Deiss

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